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Amendments to the Specification:

Please replace paragraph [0009] with the following amended paragraph:

5 The fluoride-containing wastewater is then delivered to a first reaction tank 14 to perform

a primary calcium chloride addition process 54. When the primary calcium chloride

addition process 54 is accomplished, the wastewater is then delivered to a second reaction

tank 16 to perform a secondary calcium chloride addition process 56 so that the calcium

ions of calcium chloride react with the fluoric ions of the wastewater and form calcium

fluoride. The calcium fluoride and the wastewater are then delivered to a rapid mixing

tank 18, a slow mixing tank 22, a setting settling tank 24, and a concentration tank 26

therein the calcium fluoride is separated from the wastewater by performing a solid-liquid

separation process, such as adding agglutinators or flocculants. After that, the wastewater

is able to meet the wastewater discharge standard, and a draining process 62 is performed

to discharge the wastewater.

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Please replace paragraph [0010] with the following amended paragraph:

Generally speaking, the primary calcium chloride addition process 54 performed in the

first reaction tank 14 is a preliminary reaction which works to remove approximately 70%

to 90% of fluoric ions. Therefore, the dosage of calcium chloride is determined

quantitatively by experimental data. In other words, the dosage of calcium chloride is

fixed. On the other hand, the secondary calcium chloride addition process 56 performed

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in the second reaction tank 16 is dynamic. This means a feed back control 60 is used to

dynamically adjust the dosage of calcium chloride in the secondary calcium chloride

addition process 56 according to the result of a fluoric ion detection process 58 which

detects the concentration of fluoric ions in the setting settling tank 24. For example, if the

concentration of the fluoric ions detected in the setting settling tank 24 is excessive, the

dosage of calcium chloride in the secondary calcium chloride addition process 56 is

accordingly increased to reduce the concentration of the fluoric ions in the wastewater.

Please replace paragraph [0011] with the following amended paragraph:

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It is to be noted that the wastewater contains not only the fluoride, but also considerable

sulfuric acid (H₂SO₄), nitric acid (HNO₃), and phosphoric acid (H₃PO₄), therefore

calcium sulfate (CaSO₄), calcium nitrate (Ca(NO₃)₂), and calcium <u>phosphate</u> phosphorate

(Ca₃(PO₄)₂) are also formed as well as calcium fluoride precipitate when calcium chloride

is added into the wastewater. This leads to waste of calcium chloride. In addition, the

concentration of fluoric ions is not stable. For example, if the concentration of fluoric ions

changes dramatically, such as a transient high value appearing, the secondary calcium

chloride addition process 56 will fail to control the concentration immediately. This

makes the discharged wastewater have a high fluoric ion concentration, and thus causes

environmental pollution.

Please replace paragraph [0023] with the following amended paragraph:

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The fluoride-containing wastewater is then delivered to a first reaction tank 112, and a feed forward control 214 is adopted to control a primary calcium salt addition process 216 to add calcium salt. The calcium ions of the calcium salt will react with the fluoric ions of the wastewater, form calcium fluoride, and therefore reduce the fluoric ions contained in the wastewater. Since the pH value of the fluoride-containing wastewater fluctuates inevitably to a certain extent, the feed forward control 214 is performed by using a PID controller to control the dosage of the calcium salt to be added according to the fluoric ion concentration detected in the primary fluoric ion concentration detection process 212. In addition, the PID controller can be set to a multi-stage control mechanism, which means the fluoric ion concentration is divided into several stages, and the proportion of increasing the dosage to be added is proportional to the stages. Accordingly, even if the amount of fluoric ions in the wastewater increases suddenly, the dosage calcium salt is dynamically adjusted. Furthermore, in this embodiment, the calcium salt is a mixture of calcium hydroxide and calcium chloride. As a result, two equivalent hydroxide ions are provided along with the calcium ions to reduce the acidity of the fluoride-containing wastewater. Also, the fluoride-containing wastewater in the first reaction tank 112 is still in an acidic condition, and thus the development of calcium sulfate, calcium nitride, and calcium phosphate phosphorate is inhibited.

20 Please replace paragraph [0025] with the following amended paragraph:

The fluoride-containing wastewater and the calcium fluoride are then delivered into a second reaction tank 114 to undergo a secondary calcium salt addition process 218 to add calcium salt again. The calcium ions of the calcium salt will react with the fluoric ions in the wastewater, and thus the fluoric ion concentration is reduced. Simultaneously, a neutralization process 220 is performed in the second reaction tank 114 by adding acid or

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alkaline chemicals medicaments, such as sodium hydroxide or hydrochloride, so as to

maintain a near neutral condition in the second reaction tank 114. In this embodiment, the

calcium salt added in the secondary calcium salt addition process 218 includes calcium

hydroxide and calcium chloride, which respectively provide calcium ions and hydroxide

ions, and thus the concentration of fluoric ions and hydrogen ions in the wastewater is

reduced.

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Please replace paragraph [0026] with the following amended paragraph:

The wastewater and the calcium fluoride are then delivered in turn to a rapid mixing tank

116, a slow mixing tank 118, a setting settling tank 120, and a concentration tank 122 in

which the calcium fluoride is separated from the wastewater by performing a solid-liquid

separation process, such as agglutination or flocculation. After that, the wastewater is able

to meet the wastewater discharge standard, and a draining process 226 is performed to

discharge the wastewater. In this embodiment, when the wastewater and the calcium

fluoride are delivered from the second reaction tank 114 to the rapid mixing tank 116,

proper amounts of flocculants (e.g. poly aluminum chloride) and the pH value is well

controlled so that the calcium fluoride forms calcium fluoride flocs by the flocculation

effect. The calcium fluoride flocs and the wastewater are then delivered from the rapid

mixing tank 116 to the slow mixing tank 118, and polymer chemicals medicaments are

added so that calcium fluoride flocs develop due to polymer cross-linking effect. The

wastewater and the calcium fluoride flocs are then delivered to the setting settling tank

120. The calcium fluoride flocs will gradually separate from the wastewater due to

different specific gravities. The calcium fluoride flocs are then concentrated in the

concentration tank 122 to reduce the processing costs.

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Please replace paragraph [0027] with the following amended paragraph:

The operation procedure of the fluoride-containing wastewater treatment system 110 further includes a feed back control 224. As shown in Fig.3 and Fig.4, when the solid-liquid separation process is accomplished in the setting settling tank 120, a secondary fluoric ion concentration detection process 222 is performed upon the separated wastewater. Since the wastewater in the setting settling tank 120 is adjusted to a neutral condition, the fluoric ion meter can directly measure the concentration of fluoric ions without preparing any buffer solutions. The feed back control 224 is performed to dynamically adjust the dosage of calcium salt added in the secondary calcium salt addition process 218 according to the result of the secondary fluoric ion concentration detection process 222. The feed back control 224 can also be controlled by a PID controller. For example, if the fluoric ion concentration detected in the setting settling tank 120 is excessive, the dosage of the calcium salt added in the secondary calcium salt addition process 218 is accordingly increased. Consequently, the fluoric ion concentration in the wastewater is reduced, and can be legally discharged.